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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,317	08/13/2001	Tim Goldstein	10007813-1	7481

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EXAMINER	
MERED, HABTE	
ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/928,317	GOLDSTEIN, TIM	
	Examiner	Art Unit	
	Habte Mered	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of th s communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-25 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-25 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on 05 July 2005 has been entered and fully considered.

2. Claims 1-25 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Putzolu (US 6, 584, 509) in view of Cash (EP 0701376 A2).

5. Regarding **claim 1**, *Putzolu discloses, in Point-to-Point Protocol links, a method for communicating delay sensitive data packets such as multimedia (audio and video) packets over the same link as less sensitive data such as raw bulk data packets. The applicant's embodiments described in the specification all involve Point-To-Point Protocol such as transferring images between the digital camera and the PC as shown in Figure 2 in the applicant's drawings. Putzolu also discloses that the multimedia (audio and video) packets are extracted from the data stream in smaller segments and each segment is assigned a pre-determined priority level. Putzolu also discloses high priority packets may interrupt the transmission of a low priority packet.*

Putzolu discloses a method for communicating a plurality of data sets **(See Column 2, Lines 53-77 and Column 3, Lines 43-53; The data sets as disclosed by Putzolu are the audio visual packets and other types of data packets in the**

multimedia streams) comprising: segmenting each data set into a plurality of segments **(See Column 5, Lines 1-10;Step 306 in Figure 3;Putzolu discloses a segmentation scheme used in MCML PPP that allows the segmentation of each data set into plurality of segments)** assigning a transmission precedence to each of the segments according to the data set from which it was segmented**(See Step 308 in Figure 3 and Column 5, Lines 10-20)**; and transmitting the segments in order of the assigned precedence wherein at least some lower-precedence segments are transmitted during idle transmission time between higher-precedence segments**(See Column 5, Lines 21-34 and steps 310, 320, 330 and 332 in Figure 3; Column 6, Lines 55-67 and Figure 5; Putzolu discloses that after transmission of the current packet or segment is completed then the higher priority packets always have transmission precedence over the lower priority packets. Steps 320 and 332 in Figure 3 can verify the transmission precedence of higher priority packets over the lower priority packets. However, as can be verified by step 330 in Figure 3, when there are no higher priority packets (i.e. effectively establishing idle transmission time with respect to the higher priority packets or segments) then the lower priority packets are transmitted. Putzolu further illustrates this fact by an example In Figure 5. It can clearly be seen that Class 0 defined in Table 1 is RTP audio and has higher precedence and Class 3 defined in Table 1 is bulk data and has lower precedence. In Figure 5, it is clearly shown that the lower-precedence Class 3 packets are transmitted in the idle time slots of higher-precedence Class 0 packets.).**

Putzolu fails to disclose transmitting the segments from a first device used for capturing the data sets to a second device used for storing the data sets.

Cash discloses a method and apparatus for video bit stream transmission over packet networks.

Cash discloses transmitting the segments from a first device used for capturing the data sets to a second device used for storing the data sets. **(In Figure 2 it is clear that disc 222 is used to store the high priority data segment received by Network Interface 223. See Column 1, Lines 40-45. Similarly the Client can also be a capturing as well as a storing entity using DISC 222 and 232 to store data or to capture data via the Network Interface 233.)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Putzolu's apparatus to incorporate capturing and storing devices, the motivation being in order to realize Putzolu's invention a capturing and storing devices will always be required. .

6. Regarding **claims 5 and 9**, Putzolu discloses a device for communicating a plurality of data sets **(See Figure 1A and 1B; Column 3, Lines 54-67 and Column 4, Lines 1-10)**, comprising: means for segmenting each data set into a plurality of segments **(See Column 5, Lines 1-10;Step 306 in Figure 3;Putzolu discloses a segmentation scheme used in MCML PPP that allows the segmentation of each data set into plurality of segments)**; means for assigning a transmission precedence to each of the segments according to the data set from which it was segmented**(See Step 308 in Figure 3 and Column 5, Lines 10-20)**; and means for transmitting the

segments in order of the assigned precedence whereby lower-precedence segments are transmitted during idle transmission-time between higher-precedence segments**(See Column 5, Lines 21-34 and steps 310, 320, 330 and 332 in Figure 3; Column 6, Lines 55-67 and Figure 5; Putzolu discloses that after transmission of the current packet or segment is completed then the higher priority packets always have transmission precedence over the lower priority packets. Steps 320 and 332 in Figure 3 can verify the transmission precedence of higher priority packets over the lower priority packets. However, as can be verified by step 330 in Figure 3, when there are no higher priority packets (i.e. effectively establishing idle transmission time with respect to the higher priority packets or segments) then the lower priority packets are transmitted. Putzolu further illustrates this fact by an example In Figure 5. It can clearly be seen that Class 0 defined in Table 1 is RTP audio and has higher precedence and Class 3 defined in Table 1 is bulk data and has lower precedence. In Figure 5, it is clearly shown that the lower-precedence Class 3 packets are transmitted in the idle time slots of higher-precedence Class 0 packets.).**

Putzolu fails to disclose transmitting the segments from a first device used for capturing the data sets to a second device used for storing the data sets.

Cash discloses transmitting the segments from a first device used for capturing the data sets to a second device used for storing the data sets. **(In Figure 2 it is clear that disc 222 is used to store the high priority data segment received by Network Interface 223. See Column 1, Lines 40-45. Similarly the Client can also be a**

capturing as well as a storing entity using DISC 222 and 232 to store data or to capture data via the Network Interface 233.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Putzolu's apparatus to incorporate capturing and storing devices, the motivation being in order to realize Putzolu's invention a capturing and storing devices will always be required.

7. Regarding **claims 2, 6 and 10**, Putzolu discloses a method further comprising assigning a priority to at least one of the data sets whereby segments from each such data set are assigned a higher precedence. **(See Step 208 in Figure 2 and Column 4, Lines 54-57; Step 308 in Figure 3 and Column 5, Lines 10-20);**

8. Regarding **claims 3, 7 and 11**, Putzolu discloses a method wherein the segments are Internet Protocol datagrams. **(See Column 1, Lines 24-34 and Column 5, Lines 35-45; Putzolu discloses that audio visual packets are carried as IP datagrams using UDP (User Datagram Protocol) as the transport mechanism.)**

9. Regarding **claims 4, 8 and 12**, Putzolu discloses a method wherein the data sets are image data sets. **(See Column 1,Line 17 and Lines 24-34; Column 5, Lines 35-45; Video packets are moving image data sets while camera pictures are still image data sets.)**

10. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Putzolu in view of Cash as applied to claim 1 above, and further in view of Masaki (JP11-146224).

The combination of Putzolu and Cash teaches all aspects of the claimed invention as set forth in the rejection of claim 1 but does not disclose wherein the first device is a digital camera and the data sets are image data.

Masaki discloses that the first device is a digital camera and the data sets are image data **(See Figure 1 and Paragraph 5 in the translation provided by the Applicant.).**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Putzolu's apparatus to incorporate a camera as the capturing device, the motivation being in order to realize Putzolu's invention of transmitting images a camera is best suited as the capturing device.

11. **Claims 14, 15, and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Putzolu in view of Cash as applied to claim 1 above, and further in view of Takahashi (JP64-047149).

12. Regarding **claims 14 and 17**, the combination of Putzolu and Cash teaches all aspects of the claimed invention as set forth in the rejection of claim 1 but does not disclose a method further comprising: storing higher precedence segments in a higher precedence portion of the memory of the second device.

Takahashi discloses a method further comprising: storing higher precedence segments in a higher precedence portion of the memory of the second device. **(See in Figure 2 element 21 and accompanying translation provided by Applicant)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Putzolu's apparatus to incorporate a method of

segregating memory based on data to be stored, the motivation being to reduce delay and increase efficiency and speed of accessing specific data in memory. Both Putzolu's and Takahashi's inventions seek in decreasing the latency in the data processing bandwidth of which accessing memory is part of it.

13. Regarding **claim 15**, the combination of Putzolu and Cash teaches all aspects of the claimed invention as set forth in the rejection of claim 14 but does not disclose a method further comprising: storing lower-precedence segments in a low-precedence portion of the memory of the second device.

Takahashi discloses a method further comprising: storing lower-precedence segments in a low-precedence portion of the memory of the second device. **(See in Figure 2 element 23 and accompanying translation provided by Applicant)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Putzolu's apparatus to incorporate a method of segregating memory based on data to be stored, the motivation being to reduce delay and increase efficiency and speed of accessing specific data in memory. Both Putzolu's and Takahashi's inventions seek in decreasing the latency in the data processing bandwidth of which accessing memory is part of it.

14. Regarding **claim 16**, Putzolu discloses a method wherein at least some of the idle transmission time corresponds to the high-precedence portion of the memory being full. **(In Putzolu system as long as there is data unit to be transmitted irrespective of the precedence there is no idle time and is therefore a very efficient system.**

See Column 5, Lines 21-34 and steps 310, 320, 330 and 332 in Figure 3; Column 6, Lines 55-67 and Figure 5;)

15. Regarding **claim 18**, Putzolu discloses a system, further comprising: means for storing the data sets received from the means of transmitting. **(See Column 4, Lines 5-20)**

16. Regarding **claims 19 and 20,** Putzolu discloses a system further comprising: means for determining whether a high-precedence memory portion of the second device, used for storing high-precedence ones of the data segments, is experiencing the idle transmission-time. **(In Putzolu system as long as there is data unit to be transmitted irrespective of the precedence there is no idle time and is therefore a very efficient system. See Column 5, Lines 21-34 and steps 310, 320, 330 and 332 in Figure 3; Column 6, Lines 55-67 and Figure 5;)**

17. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Putzolu (US 6,584,509) in view of Masaki (JP11-146224).

Putzolu discloses a system for communicating a plurality of data sets comprising: a first

device operative to segment each data set into a plurality of segments, assigns a transmission precedence to each of the segments and transmit the segments in a manner corresponding to the assigned precedence; **(See Column 2, Lines 53-77 and Column 3, Lines 43-53; The data sets as disclosed by Putzolu are the audio visual packets and other types of data packets in the multimedia streams. See Column 5, Lines 1-10;Step 306 in Figure 3;Putzolu discloses a segmentation scheme used**

in MCML PPP that allows the segmentation of each data set into plurality of segments. See Step 308 in Figure 3 and Column 5, Lines 10-20 for segmentation); and transmitting the segments in order of the assigned precedence wherein at least some lower-precedence segments are transmitted during idle transmission time between higher-precedence segments and wherein, responsive to determining that the memory of the second device cannot currently store additional high-precedence data segments, the first device is operative to transmit the lower-precedence segments to the second device. **(See Column 5, Lines 21-34 and steps 310, 320, 330 and 332 in Figure 3; Column 6, Lines 55-67 and Figure 5; Putzolu discloses that after transmission of the current packet or segment is completed then the higher priority packets always have transmission precedence over the lower priority packets. Steps 320 and 332 in Figure 3 can verify the transmission precedence of higher priority packets over the lower priority packets. However, as can be verified by step 330 in Figure 3, when there are no higher priority packets (i.e. effectively establishing idle transmission time with respect to the higher priority packets or segments) then the lower priority packets are transmitted.**

Putzolu fails to disclose a second device having memory operative to store the segments received from the first device.

Masaki discloses a second device having memory operative to store the segments received from the first device. **(See Figure 1, element 10 is a PC that stores the image from the PC based on Paragraph 8 of the translation provided by the Applicant)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Putzolu's apparatus to incorporate capturing and storing devices, the motivation being in order to realize Putzolu's invention a capturing and storing devices will always be required.

18. Regarding **claim 22,** Putzolu discloses that the second device is a personal computer. **(Putzolu discloses a PC as the device to implement his invention but it can be the first or the second device and is not restricted as seen in Column 4, Lines 1-20)**

19 Regarding **claim 23**, Putzolu discloses that the second device is a personal digital assistant **(PDA is a form of hand held PC and still applicable to Putzolu's invention as seen in Column 4, Lines 1-20)**.

20. **Claims 24 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Putzolu in view of Masaki as applied to claim 21 above, and further in view of Takahashi (JP64-047149).

21. Regarding **claim 24**, the combination of Putzolu and Masaki teaches all aspects of the claimed invention as set forth in the rejection of claim 21 but does not disclose that the memory of the second device has a high precedence portion and a low precedence portion, the high precedence portion being operative to store higher precedence segments received from the first device, the low precedence portion being operative to store lower precedence segments received from the first device; and

responsive to determining that the high-precedence memory portion of the second device cannot currently store additional high-precedence data segments, the first device is operative to transmit lower precedence segments.

Takahashi discloses that the memory of the second device has a high precedence portion and a low precedence portion, the high precedence portion being operative to store higher precedence segments received from the first device, the low precedence portion being operative to store lower precedence segments received from the first device; and responsive to determining that the high-precedence memory portion of the second device cannot currently store additional high-precedence data segments, the first device is operative to transmit lower precedence segments. **(Takahashi shows the first device as the terminals 161 to 164 sending to a host 12 considered a second device with different buffer for storing high and low priority data. See Figure 1 and 1st page explanation on the translation provided by Applicant)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Putzolu's apparatus to incorporate a method of segregating memory based on data to be stored, the motivation being to reduce delay and increase efficiency and speed of accessing specific data in memory. Both Putzolu's and Takahashi's inventions seek in decreasing the latency in the data processing bandwidth of which accessing memory is part of it.

25. Regarding **claim 25**, the combination of Putzolu and Masaki teaches all aspects of the claimed invention as set forth in the rejection of claim 24 but does not disclose a

system wherein the high-precedence memory portion is a first buffer and the low precedence memory portion is a second buffer.

Takahashi discloses a system wherein the high-precedence memory portion is a first buffer and the low precedence memory portion is a second buffer. **(See Figure 2 and elements 21-23 on the second page of the translation provided by the Applicant.)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Putzolu's apparatus to incorporate a method of segregating memory based on data to be stored, the motivation being to reduce delay and increase efficiency and speed of accessing specific data in memory. Both Putzolu's and Takahashi's inventions seek in decreasing the latency in the data processing bandwidth of which accessing memory is part of it.

Response to Arguments

26. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HM
09-19-2005

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